

COAXIAL LASER WELD THROUGH LID  
RF PLANARIZING PHOTONICS PACKAGE

ABSTRACT

A process for fabricating a photonics package includes securing a ferrule to an optical fiber, inserting the ferrule through a movable flange into a photonics housing containing a photodiode, adjusting the ferrule longitudinally within the flange to position the end of the optical fiber with respect to the surface of the photodiode and welding the ferrule to the flange. Thereafter, the ferrule and flange assembly is adjusted laterally with respect to the photodiode and the lower end of the flange is secured to the housing using hot gas injection or laser soldering which allows lateral adjustment of the fiber during the solder cooling process for final positioning with respect to the photodiode.